IN THE UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF TENNESSEE NASHVILLE DIVISION

AIA ENGINEERING LIMITED,)
Plaintiff/Counterclaim Defendant,)
v.)
MAGOTTEAUX INTERNATIONAL S/A & MAGOTTEAUX, INC.,)
Defendant/Counterclaim Plaintiffs.)
) No. 3:09-cv-00255
MAGOTTEAUX INTERNATIONAL S/A & MAGOTTEAUX, INC.) Chief Judge Haynes))
Third Party Plaintiffs,)
v.)
VEGA INDUSTRIES, LTD. INC.,)
Third Party Defendant.))

MEMORANDUM

Plaintiff, AIA Engineering Limited, an Indian corporation, filed this action under 28 U.S.C. § 2201, et seq., the declaratory judgment statute, against the Defendants: Magotteaux International S/A, a Belgian corporation, and Magotteaux, Inc., an affiliated Tennessee corporation (collectively, "Magotteaux"). AIA sought declaratory judgment that its products did not infringe Magotteaux's U.S. Patent No. RE 39,998 (the "998 patent"), a reissue patent based upon Magotteaux's earlier U.S. Patent No. 6.399,176 B1 (the "176 patent") as well as a declaration of the invalidity and

unenforceability of the '998 patent. In response to Plaintiff's action, Magotteaux filed a third party complaint for patent infringement against AIA and Vega Industries, Ltd., (collectively, "AIA") an AIA subsidiary with its principal place of business in Brentwood, Tennessee that sells and distributes AIA's products in the United States. AIA's claims arise under the patent laws of the United States, 35 U.S.C. § 101 et seq., with subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

AIA moved for summary judgment and the Court awarded AIA declaratory judgment that Magotteaux's '998 patent was invalid under 35 U.S.C. § 251 for impermissibly recapturing subject matter surrendered during reissue examination. (Docket Entry No. 170). Magotteaux appealed the Court's ruling. (Docket Entry Nos. 173 and 182). The Federal Circuit reversed and remanded the Court's grant of summary judgment on the basis that the Court "erred in construing the claim term 'solid solution,' and thus erred in determining that the reissued claims impermissibly recaptured surrendered subject matter." AIA Eng'r Ltd. v. Magotteaux Intern. S/A, 657 F.3d 1264, 1268 (Fed. Cir. 2011). The Federal Circuit also defined "homogenous ceramic composite" to mean "an aggregation of relatively consistent grains at least Al₂O₃ and ZrO₂, wherein each of the Al₂O₃ and ZrO₂ retains a distinct composition and/or crystal structure." Id. at 1273.

This action proceeded to trial and at the end of the proof, AIA moved for judgment as a matter of law under Federal Rule of Civil Procedure 50(a). (Docket Entry No. 438, Trial Transcript at 68). AIA's motion asserted two grounds: (1) lack of proof of wilfulness; and (2) the infringement claim under 35 U.S.C. § 271(f). <u>Id.</u> The Court reserved ruling on AIA's motion. <u>Id.</u> at 86. The jury returned a verdict in favor of Magotteaux. The jury found:

1. Magotteaux established by a preponderance of the evidence that AIA infringed claims 1, 12, 13, 16, 17, 18, 20 and 21 of Magotteaux's '998 patent.

- 2. AIA did not establish by clear and convincing evidence that claim 1 or 12 of Magotteaux's '998 patent is invalid as obvious.
- 3. AIA did not establish by clear and convincing evidence that claim 1 or 12 of Magotteaux's '998 patent is invalid as a result of a prior public use.
- 4. AIA should pay Magotteaux \$1,668,028.00 in damages for infringing the claims of the '998 patent and for failing to prove that the infringed claims are invalid.
- 5. Magotteaux established by clear and convincing evidence that AIA's infringement was willful because "given the emails between Chris Carr (Treibacher) and Dr. Bhide regarding the purchase of grains and their classifications. Additionally, Dr. Bhide's email suggested that he wanted to 'completely suppress [his] identity' and [the jury] believ[ed] AIA was fully aware of both the Xwinn technology and the patents, in place, but continued to pursue and engage in producing/selling the SinterCast products."

(Docket Entry No. 388, Jury Verdict at 1-3).

On July 3, 2012, in accordance with the jury's verdict, the Court entered judgment against AIA in favor of Magotteaux. (Docket Entry No. 390). Subsequently, the Court found that AIA "wilfully violated [Magotteaux's] patent rights" and awarded Magotteaux enhanced damages of \$3,336,056.00 pursuant to 35 U.S.C. § 284. (Docket Entry No. 390). Additionally, the Court found the case "exceptional" and awarded Magotteaux "reasonable attorneys fees" pursuant to 35 U.S.C. § 285. (Docket Entry No. 390).

Magotteaux then moved for an award of prejudgment interest, post-judgment interest and attorneys' fees and costs in an amount totaling \$3,851,906.91 (not including post-judgment interest). (Docket Entry Nos. 396 and 398). AIA opposed Magotteaux's motions for prejudgment interest and attorneys' fees and costs. (Docket Entry Nos. 436 and 437). AIA was also taxed with costs in this action. (Docket Entry No. 446). AIA moved to stay execution of the judgment in this action and any proceedings to enforce the judgment. (Docket Entry No. 409). AIA filed for judgment as a matter

of law pursuant to Rule 50 and for a new trial pursuant to Rule 59. (Docket Entry Nos. 407, 408, 410, 411 and 412).

The Court ordered a stay of proceedings to enforce the judgment pending disposition of the post-trial motions pursuant to Rule 62(b). (Docket Entry No. 452). Thereafter, the Court denied AIA's motion for judgment as a matter of law or for a new trial as to the wilfulness and exceptionalness findings. (Docket Entry No. 468). The Court also awarded Magotteaux attorneys' fees and costs, prejudgment interest and post-judgment interest. (Docket Entry No. 469).

Before the Court are AIA's motions for judgment as a matter of law and/or for a new trial: (1) AIA's motion for judgment as a matter of law or for a new trial as to infringement under 35 U.S.C. § 271(f) (Docket Entry No. 408); (2) AIA's motion for a new trial as to non-infringement based upon jury instructions (Docket Entry No. 410); (3) AIA's motion for a new trial on whether the '998 patent claims are invalid under 35 U.S.C. § 102(b) (Docket Entry No. 411); and (4) AIA's motion for a new trial on whether the '998 patent claims are invalid under 35 U.S.C. § 103 (Docket Entry No. 412). Magotteaux opposes these motions. (Docket Entry Nos. 453, 454, 455 and 456).

A. Conclusions of Law

A party may move for judgment as a matter of law under Fed. R. Civ. P. 50. and for such a motion, the Court views the evidence in the light most favorable to the nonmoving party. Wilcox v. Tricam Indus., No. 1-08-0030, 2010 U.S. Dist. Lexis 51104, at *3 (M.D. Tenn. May 21, 2010) (citing Reeves v. Sanders Plumbing Prods., Inc., 530 U.S. 133, 150 (2000)). Yet, the Court cannot "reweigh the evidence or assess the credibility of witnesses" because the "review is restricted to the evidence that was admitted at trial." Sykes v. Anderson, 625 F.3d 294, 305 (6th Cir. 2010) (citations omitted).

Under Fed. R. Civ. P. 59(a), in considering a motion for a new trial, the Court must determine if the jury could reasonably reach the verdict based upon the evidence. <u>Powers v. Bayliner Marine Corp.</u>, 83 F.3d 790, 798 (6th Cir. 1996). All credibility issues are for the jury's determination. <u>Farber v. Massillon Bd. of Educ.</u>, 917 F.2d 1391, 1395 (6th Cir. 1990). The Court cannot set aside the jury verdict absent a showing of a "seriously erroneous result' as evidenced by: (1) the verdict being against the weight of the evidence; (2) the damages being excessive; or (3) the trial being unfair to the moving party in some fashion, i.e., the proceedings being influenced by prejudice or bias." <u>Holmes v. City of Massillon</u>, 78 F.3d 1041, 1046 (6th Cir. 1996). Again, the evidence is viewed "most strongly in a light in favor of the verdict." <u>Ross v. Meyers</u>, 883 F.2d 486, 488 (6th Cir. 1989).

1. Infringement Finding

As to AIA's motion for judgment as a matter of law or for a new trial on infringement under 35 U.S.C. § 271(f), "no infringement occurs when a patented product is made and sold in another country." Microsoft Corp. v. AT&T Corp., 550 U.S. 437, 441 (2007). Yet, a statutory exception under § 271(f) provides:

- (f)(1) Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.
- (2) Whoever without authority supplies or causes to be supplied in or from the United States any component of a patented invention that is especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use, where such component is uncombined in whole or in part, knowing that such component is so made or adapted and intending that such component will be combined outside of the United States in a manner that

would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.

35 U.S.C. § 271(f)(1)-(2).

Congress enacted § 271(f) to close the loophole in patent law created in <u>Deepsouth Packing</u>

Co. v. Laitram Corp., 406 U.S. 518 (1972), holding that shipping component parts of a patented device out of the United States for assembly was not an act of direct infringement. <u>Id.</u> at 532. The purpose of § 271(f) is to preclude "copiers from avoiding [United States] patents by supplying components of a patented product in this country so that the assembly of the components may be completed abroad." <u>Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc.</u>, No. 95 CIV 8833, 2001 WL 1263299, at *4 (S.D.N.Y. 2001), <u>affirmed</u>, 326 F.3d 1226 (Fed. Cir. 2003). "[B]oth subsections (1) and (2) are directed to the supply of components in or from the United States, either directly or through some other party, and the combination of such components outside the United States." <u>Id.</u> at *6.

To prove liability under $\S 271(f)(1)$ a party must show that the alleged infringer supplied or caused to be supplied multiple components in or from the United States. <u>Id.</u> at *4.

The statute repeatedly refers to 'components' in the plural. In addition, the statute's use of the term 'such components' refers back to the supply of 'all or a substantial portion of the components.' One cannot actively induce the combination of 'such components' outside the United States where there is only one 'such' component supplied in or from the United States.

<u>Id.</u> (contrasting subsection (f)(1) with (f)(2) that is applicable to "any component of a patented invention"). For example, in <u>Microsoft Corp. v. AT&T Corp.</u>, 550 U.S. 437 (2007), the Supreme Court held that a copy of computer software qualified as a component within the meaning of § 271(f)(1). <u>Id.</u> at 451-52.

AIA contends that AIA did not infringe under § 271(f)(1) because the ceramic grains are only one single component of Sintercast products, not more than one component as required under § 271(f)(1). AIA asserts that the ceramic grains are not especially made or adapted for the patented invention, as required under § 271(f)(2). (Docket Entry No. 408-1 at 5-9). AIA also argues that the ceramic grains "[are] a standard ceramic product capable of substantial noninfringing use, as a matter of law, any Sintercast product manufactured and sold outside the United States using these grains cannot infringe" under § 271(f). <u>Id.</u> at 9. In response, Magotteaux contends that Magotteaux satisfied the requirements for proving infringement under both § 271)(f)(1) and (2). (Docket Entry No. 456 at 2). Magotteaux asserts that there was sufficient evidence at trial to sustain the jury verdict under § 271(f)(1) and (2), specifically:

- the uncontroverted evidence showed that alumina and zirconia are independent ingredients that are both required for practice of the '998 Patent;
- AIA's witness, Dr. Bhide, testified that the '998 Patent is a two component system consisting of alumina and zirconia;
- the uncontroverted evidence showed that AIA purchased more than fifteen metric tons of ZK40 made of alumina and zirconia in the U.S. as required by the '998 Patent;
- the uncontroverted evidence showed that AIA's purchase of alumina and zirconia grains constituted a "substantial portion" of the components of the '998 Patent;
- the uncontroverted evidence showed that AIA's Dr. Bhide and Vega's David Hurlock specially ordered ZK40 grains from a grain supplier, Vega's calling them special purpose grains; and
- the uncontroverted testimony from Chris Carr, salesman for the grain supplier Treibacher, shows that the grains were indeed special purpose grains adapted for use in practice of the '998 Patent, and that they would never have been used as sandpaper.

Id. at 2-3. In addition, Magotteaux asserts that the Court should deny the motion "simply because

271(f) damages were not needed for the damages verdict awarded." <u>Id.</u> at 3.

The Court concludes that AIA has not shown entitlement to judgment as a matter of law or a new trial on the jury's finding of infringement. The testimony of Dr. Bhide at trial supported the jury's verdict under § 271(f)(1): "Moreover, Magotteaux grains, as confirmed in their patent, was a two component system, consisting of alumina and zirconia." (Docket Entry No. 424, Trial Transcript 77:5-7) (emphasis added). In addition, the September 20, 2004 email from Dr. Bhide to David Hurlock refers to the grains as "special purpose" grains, supported the jury's verdict under § 271(f)(2). Chris Carr's trial testimony also supports the jury's verdict by reflecting how the grains are different from the grains used for sandpaper. <u>Id.</u> at 144:7-21. As stated in earlier rulings, the trial evidence sufficiently supports the jury's verdict of infringement under § 271(f). Thus, the Court concludes the jury's finding is not "seriously erroneous." Accordingly, AIA's motion for judgment as a matter of law or for a new trial as to the finding of infringement under § 271(f) should be denied.

2. Claim Construction

AIA next moves for a new trial on the basis that AIA was prejudiced by the Court's jury instructions on claim construction. The doctrine of the "law of the case" provides that "when a court decides upon a rule of law, that decision should continue to govern the same issues in subsequent stages in the same case. Law of the case directs a court's discretion, it does not limit the tribunal's power." Arizona v. California, 460 U.S. 605, 618 (1983) see also Yeschick v. Mineta, 675 F.3d 622, 633 (6th Cir. 2012). "To determine whether a district court violated the law of the case doctrine, [the Sixth Circuit] considers: 'a) whether the [] issue was expressly or impliedly decided by [the] court in [the first appeal], and b) whether [the] court's mandate to the district court was so narrow in scope as to preclude the district court from considering the [] issue." Id. (quoting Waste Mgmt. of Ohio,

Inc. v. City of Dayton, 169 Fed. Appx. 976, 986 (6th Cir. 2006)).

In 2011, after Magotteaux appealed the Court's summary judgment ruling on whether the '998 Patent impermissibly recaptured surrendered subject matter, the Federal Circuit defined "homogenous ceramic composite' [to mean] 'an aggregation of relatively consistent grains of at least Al₂O₃ and ZrO₂, wherein each of the Al₂O₃ and ZrO₂ retains a distinct composition and/or crystal structure." <u>AIA Eng'g Ltd.</u>, 657 F.3d at 1273. In this action, the Court provided the jury with the following instructions:

The term 'homogenous ceramic composite' in the '998 patent has already been determined. It means 'an aggregation of relatively consistent grains of at least Al_2O_3 and ZrO_2 , wherein each of the Al_2O_3 and ZrO_2 retains a distinct composition and/or crystal structure.

The Court also instructs you that you are not to apply or define the term homogenous. This term, homogeneous, does not require uniform nor near uniform distribution of crystals. Rather, homogenous refers to the relatively consistent grains of the chemicals in this patent.

(Docket Entry No. 381, Jury Instructions at 25).

AIA contends that the Court's additional language in the jury instructions goes against the Federal Circuit's law on claim construction and violates the "law of the case" doctrine. (Docket Entry No. 410-1 at 2). In response, Magotteaux asserts that AIA fails to present any evidence to reflect that the Court's jury instructions, when taken as a whole, are inadequate or misleading. (Docket Entry No. 454 at 2). Magotteaux contends that the Court's additional jury instructions were necessary in light of AIA's repeated attempts to redefine "homogenous." <u>Id.</u> at 5. In addition, Magotteaux asserts that the jury instructions are consistent with the Federal Circuit's definition of "homogenous" and satisfy the "law of the case" doctrine. <u>Id.</u> at 8.

The Court concludes that the jury instructions were consistent with the Federal Circuit's

ruling. The Court repeated the Federal Circuit's definition of "homogenous ceramic composite" to the jury. Further, the instructions did not supplement or detract from the Federal Circuit's definition. The Federal Circuit's ruling did not preclude the Court from considering the definition of "homogenous ceramic composite." Accordingly, AIA's motion for a new trial based upon jury instructions regarding the definition of "homogenous ceramic composite" should be denied.

3. Public Use

For AIA's motion asserting public use, 35 U.S.C. § 102(b) provides that "[a] person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States." 35 U.S.C. § 102(b). "The purpose of the public use bar to patentability is to discourage 'the removal of inventions from the public domain which the public justifiably comes to believe are freely available." Am. Seating Co. v. USSC Grp., Inc., 514 F.3d 1262, 1267 (Fed. Cir. 2008) (quoting Bernhardt, LLC v. Collezione Europa USA, Inc., 386 F.3d 1371, 1379 (Fed. Cir. 2004)).

The invalidity of a patent based on public use is a question of law based upon the underlying facts. Am. Seating Co., 514 F.3d at 1267. The test for invalidity under § 102(b) is: "(1) was accessible to the public; or (2) was commercially exploited." <u>Id.</u> (quoting <u>Invitrogen Corp. v. Biocrest Mfg., L.P.</u>, 424 F.3d 1274, 1380 (Fed. Cir. 2005)).

Consideration of public use includes analysis of, ..., the nature of and public access to activities involving the invention; confidentiality obligations imposed upon observers; commercial exploitation; and the circumstances surrounding testing and experimentation. An invention is in public use if it is shown to or used by an individual other than the inventor under no limitation, restriction, or obligation of confidentiality. However, 'use of an invention by the inventor himself, or of any other person under his direction, by way of experiment, and in order to bring the

invention to perfection, has never been regarded as such a use.

Am. Seating Co., 514 F.3d at 1267 (quoting Invitrogen Corp., 424 F.3d at 1380); see also Petrolite Corp. v. Baker Hughes, Inc., 96 F.3d 1423, 1426 (Fed. Cir. 1996) ("Experimental use is a question of law to be analyzed based on the totality of the surrounding circumstances. 'Objective evidence such as the length of the test period, whether payment was made for the device, whether there was a secrecy agreement, whether progress reports were kept, whether someone other than the inventor conducted the experiments, and the overall number of tests may be considered."'). The conclusion that a patent is invalid based upon public use must be based upon clear and convincing evidence. Netscape Comm. Corp. v. Konrad, 295 F.3d 1315, 1320 (Fed. Cir. 2002).

A use is experimental where "it is designed to (1) test claimed features of the invention or (2) to determine whether an invention will work for its intended purpose – itself a requirement of patentability. <u>Clock Spring, L.P. v. Wrapmaster, Inc.</u>, 560 F.3d 1317, 1327 (Fed. Cir. 2007).

The experimental use exception is not a doctrine separate or apart from the public use bar. Rather, something that would otherwise be a public use may not be invalidating if it qualifies as an experimental use. . . . [F]actors that in previous cases had been found instructive, and in some cases dispositive, for determining commercial versus experimental uses. These factors include:

- (1) the necessity for public testing,
- (2) the amount of control over the experiment retained by the inventor,
- (3) the nature of the invention,
- (4) the length of the test period,
- (5) whether payment was made,
- (6) whether there was a secrecy obligation,
- (7) whether records of the experiment were kept,

- (8) who conducted the experiment,
- (9) the degree of commercial exploitation during testing,
- (10) whether the invention reasonably requires evaluation under actual conditions of use,
- (11) whether testing was systematically performed,
- (12) whether the inventor continually monitored the invention during testing, and
- (13) the nature of contacts made with potential customers.

Id. at 1226-27.

AIA contends that the evidence presented at trial clearly and convincingly reflects that "Magotteaux placed the claimed invention in public use in the United States at Empire Mining prior to the August 27, 1996 critical date." (Docket Entry No. 411-1 at 3). AIA asserts "that metal-ceramic lifter bars embodying the claimed invention were shipped to Empire Mining on July 15, 1996." Id. at 4. AIA contends that the shipment reflects "public use" because, under 35 U.S.C. 102(b), public use "includes [use by] anyone other than the inventor." Id. In addition, AIA asserts that the undisputed lack of a "confidentiality Agreement between Empire Mining and Magotteaux" and "the lack of "restrictions of obligations of secrecy associated with Empire Mining's use of the product establishes the use was public use." Id. at 7-8.

Further, AIA contends that Magotteaux's claimed use was not experimental because: (1) the claimed invention was reduced to practice before use by Empire Mining; (2) Empire Mining's use was performed to tailor a commercial product to a specific customer's needs and not related to refining any of the claims in the '998 Patent; (3) the Empire Mine testing was not testing for the purposes of a patent application; and (4) the claimed invention was embodied in other products

offered commercially before Empire Mining's use. <u>Id.</u> at 8-12.

In response, Magotteaux asserts that AIA does not meet the burden under Rule 59 for a new trial because the jury's verdict was not seriously in error. (Docket Entry No. 455 at 3). Magotteaux contends that AIA failed to prove the claimed invention was in prior public use as to all the claims of the '998 Patent. <u>Id.</u> at 4-5. AIA failed to prove prior use of claims 1 and 12. <u>Id.</u> at 5. In addition, Magotteaux contends that Magotteaux "exerted significant control by its limitations and restrictions on Empire, and thus the test cannot qualify as public use," <u>id.</u> at 6, and cites the relevant evidence:

- Magotteaux selected Empire Mining for the testing.
- Magotteaux selected the ten test bars to be tested, with varied compositions and color coding.
- Magotteaux protected the identity of the composition of the ten different test samples.
- Magotteaux selected the testing location in the mill.
- Magotteaux supervised the installation of the color-coded test bars coded by Magotteaux to track each unique test bar.
- Magotteaux tracked the bars by serial numbers.
- Magotteaux sent the test results back to Hubert Francios for analysis.
- Magotteaux visited and monitored the test samples during the test every two weeks.
- Magotteaux retained title to the test samples and received all of the bars from Empire after the test failed.

(Docket Entry No. 455 at 7-8). Further, Magotteaux responds that the evidence reflects that the Empire Mining experiment was "experimental" within the meaning of the Patent Act and under the

Clock Spring factors. Id. at 10.

The Court concludes that AIA has not met its burden that the Empire Mining was public use. The jury found that "AIA did not establish by clear and convincing evidence that any of the claims of Magotteaux's '998 patent is invalid as a result of prior public use." (Docket Entry No. 388, Jury Verdict). The evidence reflects that Magotteaux had sufficient control over the Empire Mining use and maintained confidentiality. As such, the Court concludes that the jury's finding that the '998 patent was not invalid due to public use was not seriously erroneous as to warrant a new trial under Rule 59.

AIA also contends that the Court erred in the public use and experimental jury instructions. Id. at 13. The jury instructions stated:

The test for whether an invention is ineligible for a patent due to the section 102(b) public use bar is whether the purported use: (1) was accessible to the public; or (2) was commercially exploited.

Although a written promise of confidentiality is a factor to be considered in appropriate circumstances, such as when persons other than the patentee conduct the experiments, the absence of such a promise does not make a use 'public' as a matter of law.

Certain activities are experimental if they are a legitimate effort to perfect the invention or to determine if the invention will work for its intended purpose. So long as the primary purpose is experimentation, it does not matter that the public used the invention or that the inventor incidentally derived profit from it.

(Docket Entry No. 381, Jury Instructions at 43-44). AIA asserts prejudice from the Court's jury instructions because the instructions fail to state the law accurately. The Court concludes, however, the jury instructions accurately state the law related to public and experimental use. See Am. Seating Co., 514 F.3d at 1267. Accordingly, AIA's motion for a new trial on invalidity of '998 patent due to public use should be denied.

4. Obviousness

AIA next seeks a new trial based upon the obviousness of the '998 patent. 35 U.S.C. § 103 provides the standard to determine whether a patent is invalid as obvious:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35 U.S.C. § 103. "Obviousness . . . is a question of law, with underlying factual considerations regarding (1) the scope and content of the prior art, (2) the differences between the prior art and the claimed invention, (3) the level of ordinary skill in the art, and (4) any relevant secondary considerations." <u>Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc.</u>, 555 F.3d 984, 991 (Fed. Cir. 2009) (citing the <u>Graham factors</u>); <u>see Graham v. John Deere Co.</u>, 383 U.S. 1, 17-18 (1966).

For its arguments on obviousness, AIA asserts that the claims of the '998 patents were present in the prior art. (Docket Entry No. 412-1 at 3). Specifically, AIA contends that "the '998 patent include[d] nothing more than a combination of pre-existing and known technology" as reflected in Dr. Glaeser's testimony about Japanese patent publications — Ariake, Tamura and Kawashima — that "teach" the elements of the '998 patent claims, prior to Magotteaux's invention. Id. at 3-4. AIA asserts that Dr. Glaeser's testimony further reflected obviousness because of his testimony as to the 1965 Marshall reference and the 1982 Lange technical publication that "demonstrates the precise composition ratio of alumina-zirconia claimed in the '998 patent" at least fourteen years before. Id. at 5.

AIA concedes that the "only remaining claim limitation that is arguably not included in the above-cited prior art is the requirement that the ceramic composite be 'homogenous.'" Id. AIA contends, however, that "Dr. Glaeser's [testimony] shows the limitation 'homogenous' in the '998 claims was not only known in the art for at least fifteen years before the priority date, but it was also considered to be a very important feature in producing tougher ceramic composites using zirconia."

Id. at 6. AIA also contends that "[t]he evidence shows that persons of skill in the art already know how to form a homogenous ceramic composite of alumina and zirconia impregnated with molten metal to form a wear-resistant part well before the invention." Id. at 7. AIA also asserts that Magotteaux's presentation of "secondary considerations" does not overcome AIA's strong prima facie showing that the prior art consisted of all the elements of the '998 patent claims. Id. at 10. Finally, AIA contends that the Court erred in refusing to allow AIA to call Dr. Glaeser as a rebuttal witness because it deprived AIA the opportunity to refute Magotteaux's expert. Id. at 12.

In response, Magotteaux contends that AIA did not meet its burden to prove obviousness because AIA did not even perform an obviousness analysis under the <u>Graham</u> factors and AIA's expert witness, Dr. Glaeser, did not "perform[] the necessary factual inquiries required to arrive at an obviousness conclusion." (Docket Entry No. 453 at 4-5). Magotteaux also contends that Dr. Glaeser could not differentiate between the prior art and the claims of the '998 patent and did not testify as to secondary considerations. Id. at 5-9.

The Court concludes that AIA has not met its burden to prove by clear and convincing evidence that the '998 patent was invalid due to obviousness. After reviewing the evidence, the Court finds there is insufficient evidence to support AIA's motion for a new trial because AIA failed to present evidence regarding the obviousness factors, including the scope and content of the prior

art, the difference between the prior art and the claimed invention, the level of skill in the art, and relevant secondary considerations. Thus, the jury did not seriously err by finding that AIA did not "establish by clear and convincing evidence that any of the claims of Magotteaux's '998 patent is invalid as obvious." (Docket Entry No. 388, Jury Verdict). Accordingly, AIA's motion for a new trial based on the invalidity of the '998 patent due to obviousness should be denied.

B. Conclusion

For these reasons, the Court concludes that there is insufficient evidence to disturb the jury's verdict or to grant a new trial on the issues of infringement, public use, obviousness or claim construction. As such, AIA's motions for judgment as a matter of law and/or for a new trial (Docket Entry Nos. 408, 410, 411 and 412) should be denied.

An appropriate Order is filed herewith.

ENTERED this 13 day of November, 2012.

Chief Judge

United States District Court